

ABSTRACT

An apparatus for cleaning a substrate is provided. The apparatus comprises a plurality of rollers adapted to support a substrate in a vertical orientation, a scrubber brush adapted to contact a substrate supported by the plurality of rollers, and a sonic nozzle positioned at an elevation below the elevation of the scrubber brush and adapted so as to output a sonicated fluid spray that contacts a beveled edge or a major surface of the substrate such that fluid having sufficient sonic energy to harm the scrubber brush will not contact the scrubber brush.

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